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REMARKS

Claims 21-27 and 29 remain pending in this application. All outstanding grounds of rejection again have been withdrawn, and new grounds of rejection have been instituted, based on newly cited prior art references to Brown et al. and Möller et al. These grounds of rejections also are respectfully traversed, and further reconsideration of this application is requested.

35 U.S.C. § 103 Rejections

The rejection of claims 21, 22 and 24 as being unpatentable over Han, U.S. Patent No. 6,007,038 in view of Brown et al., U.S. Patent No. 5,872,892 ("Brown") is respectfully traversed. The Office action states that Brown teaches the use of a keypad or computer keyboard to control mechanical movements. The Office action alleges that it would have been obvious to one of ordinary skill in the art to "embed the mechanical movement controller [of Han] with the computer keyboard because keyboards are the standard input devices of computer systems and combining the functionality of different controlling components will reduce the number of redundant auxiliary control devices." This ground of rejection is improper for two reasons. First, one of ordinary skill in the art would not have been motivated to combine Han with Brown as alleged, because these references are in non-analogous fields of art. Second, even if combinable, there is no teaching, suggestion or motivation in Brown to have modified the Han apparatus as alleged in the Office action.

Brown discloses a robotic manipulator arm for providing repetitive linear motion to a tooling workpiece between two predefined coordinate points in two-dimensional space. As shown in Fig. 1, the manipulator arm 10 is mounted on a base 12, and is controlled by a processor 121 through an interface 23. The processor 121 includes a keyboard input device 300.

As shown in Fig. 9, the arm 10 is used to provide linear motion to a workpiece 126 between point P1 denoted by coordinates (P1Xbase, P1Ybase) and point P2 denoted by coordinates (P2Xbase, P2Ybase). As explained at col. 10, l. 42 to col. 11, l. 2, the processor 121 is programmed to execute this repetitive robotic motion by an operator.

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The operator defines the end points of the straight line path along which the wrist pivot 32 of the arm 10 is to move, by moving the wrist pivot 32 (via control keys on a control keypad or keyboard 300 associated with the processor) to first point P1, and actuating a record key so that the processor 121 records the position of the arm at point P1. The operator then moves the wrist pivot 32 to the desired second point P2, and again actuates the record key so that the processor 121 records the position of the arm at point P2. The set-up is then completed, after which the processor 121 causes the manipulator arm to move in such a manner that the wrist pivot 32 moves linearly between the first point P1 and the second point P2.

It would not have been obvious for one of ordinary skill in the art to combine the Han tilt and swivel apparatus for a display monitor with the Brown reference directed to a robotic manipulator arm for a tooling workpiece, as these references represent non-analogous art. That is, one of ordinary skill in the art would not consult the industrial robotics field to solve perceived problems in the consumer personal computer display monitor field. The tilt and swivel display apparatus of Han is used to vary the static positioning of a display monitor to suit the viewing angle of a user; in contrast, the robotic arm manipulator of Brown is used to provide repetitive linear motion to an industrial workpiece such as a welding device, in a manufacturing environment. The Office has made no showing, and it submitted that there exists no evidence, that those skilled in the personal computer field would seek to find solutions for personal computer display viewing angle modification in the industrial robotics field. As such the proposed combination of prior art references is improper as there has not been established sufficient linking or motivation to combine those prior art references under 35 U.S.C. §103.

Secondly, the keyboard of the Brown apparatus is used by an operator in a set-up mode to program the processor 121 to move the manipulator arm in a linear motion between two points. Han discloses a tilt and swivel apparatus 30 for a computer monitor, which has a remote control signal receiver 61, and manual tilt and swivel control keys 71-74. There exists no motivation in the Brown disclosure to modify Han to include computer keyboard control of tilt and swivel functions as alleged. The Han

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apparatus already provides manual control keys 71-74 and remote signal receiver 61 to receive remote control signals for tilt and swivel control. As such, there is no identified deficiency in the operation of the Han apparatus that Brown would cure. Brown certainly does not teach any advantage in substituting a keyboard control for the manual key/remote control operation disclosed in Han, and the Office action has not pointed out any such teaching or suggestion.

The fact that keyboards are the standard input devices of computer systems as asserted in the Office action respectfully is irrelevant to the issue of whether one skilled in the art would have been motivated to modify the Han swivel apparatus in view of Brown. Han is not directed to a computer system, but instead provides a separate and discrete tilt and swivel apparatus 20, 30, 40 upon which a display monitor sits. There is no computer system involved in the Han apparatus.

Similarly, the conclusion in the Office action that "combining the functionality of different controlling components will reduce the number of redundant auxiliary control devices" finds no basis from the prior art of record, but instead is based on a reading of the present application. Brown does not teach combination of functionality of different components to reduce redundancy; further, if one skilled in the art wished to eliminate control redundancy in Han, one would eliminate either the manual keys 71-74 or the remote control. There exists no reason or suggestion to add control via a computer keyboard as alleged in the Office action.

The rejection of claims 23, 25, 27 and 29 as being unpatentable over Han in view of Möller et al., U.S. Patent No. 6,411,934 ("Möller") also is respectfully traversed. Möller is directed to an operating system for components of a motor vehicle, with different operating functions of a manually operable actuating device being assigned by the voice operated device. The user actuates the actuating device and then speaks a voice command into the voice unit, such that thereafter the stored voice command is associated with the operation indicated by actuating the manual actuating device. This can be repeated for multiple functions.

Claim 23 depends from claim 21 and includes the limitations thereof. Thus, claim 23 is not obvious from any combination of Han with Möller. With respect to independent

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claim 25, the Office action has not established sufficient motivation for one skilled in the art to have modified Han with Möller as alleged. Whether Han's invention "can [be] easily modified to resemble the claimed invention by including Möller's voice input device" is not a proper test of obviousness under 35 U.S.C. § 103. The motivation for combining prior art references must come from the prior art itself, and not from an attempt to reconstruct the claimed invention. Further, the test for obviousness is not whether the prior art could be modified to result in the claimed invention, but rather whether the prior art suggests such modification. Here, there is no suggestion to modify Han with Möller to provide hands-free control. Möller is concerned with operation of a motor vehicle, wherein continuous driver control of the steering wheel is critical to safety. On the other hand, there is no identified shortcoming in the Han device that would be solved by incorporating the Möller apparatus. Again, the only suggestion for making such combination comes from the present application.

Finally, the rejection of claim 26 as being unpatentable over Han in view of Möller and Brown, is traversed for all of the foregoing reasons above.

Conclusion

In view of the foregoing, claims 21-27 and 29 are submitted to be patentable over the prior art of record, whether considered individually or in combination. Withdrawal of the outstanding grounds of rejection and the issuance of a Notice of Allowance are earnestly solicited.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17 to Deposit Account No. 08-2025.

RESPECTFULLY SUBMITTED,			
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